

AMENDMENTS TO THE CLAIMS

1. (Original) A method for isolating a phosphorylated target molecule in a sample, said method comprising the steps of:
 - a) contacting said sample with a binding solution comprising a metal chelating moiety; a salt comprising trivalent metal ions, wherein said metal ion is capable of simultaneously binding said metal chelating moiety and a phosphorylated target molecule; and, an acid;
 - b) incubating said sample and said binding solution, to form a combined mixture, for a sufficient amount of time to allow said metal chelating moiety and said metal ion to associate with said phosphorylated target molecule;
 - c) separating said phosphorylated target molecules from unphosphorylated molecules by a chromatography means whereby said phosphorylated target molecule is isolated; and,
 - d) optionally determining a sequence of the isolated phosphorylated target molecule by a sequencing means.
2. (Original) The method according to Claim 1, wherein said chromatography means include a size exclusion column or a reverse phase HPLC column.
3. (Original) The method according to Claim 2, wherein said sequencing means utilizes a mass spectrometer.
4. (Original) The method according to Claim 1, wherein said metal chelating moiety is covalently bonded to a label and said method further comprises illuminating said label with a suitable light source whereby said bound phosphorylated target molecule is detected.
5. (Original) The method according to Claim 4, wherein said label is selected from the group consisting of a dye and a hapten.

6. (Original) The method according to Claim 5, wherein said dye is selected from the group consisting of a benzofuran, a quinazolinone, a xanthene, an indole, a benzazole and a borapolyazaindacene.
7. (Currently Amended) The method according to Claim 6, wherein said xanthene is selected from the group consisting of a fluorescein, a rhodol, a rosamine, and a rhodamine and derivatives thereof.
8. (Original) The method according to Claim 1, wherein said phosphorylated target molecule is selected from the group consisting of proteins, peptides, nucleotides, carbohydrates, phosphatase substrates, kinase substrates, lipids and inorganic phosphate.
9. (Original) The method according to Claim 1, wherein said metal chelating moiety is selected from the group consisting of BAPTA, IDA, DTPA and phenanthrolines.
10. (Original) The method according to Claim 7, wherein said binding solution has a pH about 3 to about pH 6.
11. (Original) The method according to Claim 8, wherein said metal ion is selected from the group consisting of Ga^{3+} , Fe^{3+} and Al^{3+} .
12. (Original) The method according to Claim 9, wherein said salt is gallium chloride.

Claims 13-25. (Canceled)